## WHAT IS CLAIMED IS:

- 1. A coating system comprising organic polyisocyanates with at least two isocyanate groups, at least difunctional alcohols that are not present in their O-H acid form, and a catalyst to accelerate the alcohol-isocyanate reaction.
- 2. The coating system according to claim 1, wherein unsaturated enol ethers are used as a blocking agent for the alcohol component.

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- 3. The coating system according to claim 1, wherein dihydropyran or dihydrofuran are used as a blocking agent for the alcohol component.
- 4. The coating system according to claim 1, wherein Lewis acids are used as the catalyst.
  - 5. The coating system according to claim 4, wherein zinc-2-ethyl hexanoate or zirconium-2-ethyl hexanoate are used as the catalyst.
- A process for producing polyurethane paint films comprising reacting blocked alcohols with polyisocyanates in the presence of one or more catalysts.
- 7. The process according to claim 6, wherein unsaturated enol ethers are used as blocking agent for the blocked alcohol component.
  - 8. The process according to claim 6, wherein the blocking agent is selected from dihydropyran and dihydrofuran.

- 9. A surface coating obtained from the coating system according to claim 1.
- 10. A substrate coated with the surface coating according to claim 9.
- 5 11. The coating system according to claim 2, wherein Lewis acids are used as the catalyst.
  - 12. The coating system according to claim 3, wherein Lewis acids are used as the catalyst.
  - 13. The coating system according to claim 11, wherein zinc-2-ethyl hexanoate or zirconium-2-ethyl hexanoate are used as the catalyst.
- 14. The coating system according to claim 12, wherein zinc-2-ethyl hexanoate or zirconium-2-ethyl hexanoate are used as the catalyst.
  - 15. The process according to claim 7, wherein the blocking agent is selected from dihydropyran and dihydrofuran.
- 20 16. A surface coating obtained from the coating system according to claim 2.
  - 17. A substrate coated with the surface coating according to claim 16.
  - 18. A surface coating obtained from the coating system according to claim 3.

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- 19. A substrate coated with the surface coating according to claim 18.
- 20. A surface coating obtained from the coating system according to claim 4.
- 5 21. A substrate coated with the surface coating according to claim 18.
  - 22. A surface coating obtained from the coating system according to claim 5.
  - 23. A substrate coated with the surface coating according to claim 22.